

forests there is so small, and the circumstances of the people such as to justify the exercise of rigid conservancy."

154. In the Mándvi Táluka all minor products were allowed to be collected and removed free of charge, with the exception of mhowra flowers, by the wild tribes and people of forest villages. A fee of four annas a maund was imposed on this product, and permission to tap toddy trees within forest limits when solicited was granted on the payment of a rupee per tree.

155. The arrangements for regulating the collection and sale of minor products under the procedure laid down in the Resolution quoted above in the forests of the Panch Maháls and those leased from the Rájás in the Dángs were not completed when the year closed.

CHATER III.

GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

DEPARTMENTAL OPERATIONS.

156. The following summary exhibits the quantity of timber and other forest produce worked out departmentally during the two years 1891-92 and 1892-93 :—

No.	Division.	Year.	IN CUBIC FEET.		IN NUMBER.	IN KHANDIS.
			Timber.	Firewood.	Bamboos.	Hirdas.
						Kh. mds. lbs.
1	East Thána ...	1891-92 ...	17,247	...	...	143 7 0
		1892-93 ...	32,550	20,376	...	30 13 12
2	West Thána ...	1891-92 ...	10,839	79,602	...	70 3 0
		1892-93 ...	1,245	4,714	...	9 11 0
3	Surat ...	1891-92 ...	1,76,665	18,491	...	.....
		1892-93 ...	77,685	...	3,000	.....
4	Panch Maháls ...	1891-92 ...	25,415	210,700	...	.....
		1892-93 ...	4,070	10,700	...	.....
	Total ...	1891-92 ...	230,166	308,793	...	213 10 0
		1892-93 ...	115,550	35,790	3,000	39 24 12

157. In the two Thána divisions, variations in the yield of timber and firewood do not call for any special remarks; as their extraction depends on the number of unsold coupes of the year, it is necessary to exploit for the convenience of the privileged classes at the instance of the Revenue Department.

158. In the Surat Division there was less timber worked out, as it was deemed necessary to limit the exploitation in the Dángs to such quantities as could be disposed of during the year from the Wághrech and other sale depôts without running the risk of overfeeding the markets.

159. Departmental operations in the Panch Maháls were suspended to prosecute vigorously the clearing of reserved wood from occupied and other lands. The yield of the year shown in the foregoing statement represents the quantity of produce derived from boundary-line clearances.

160. Bamboos were only cut by departmental agency to permit of floating operations being undertaken down the Ambika River from Waghál in the Dángs to the Wághrech depôt on the sea-coast.

161. The hirda crop of the year was the worst hitherto known, and consequently the quantity collected was much less than in the previous year.

162. The following is an abstract of the details exhibited in Form No. 59 :

No.	Division.	Balance on 1st April 1892.			Outturn of the year (15 months).			Total of Columns 5 and 8.	Disposed of during the year.			Balance on 30th June 1893.		
		Timber.	Fire-wood.	Total.	Timber.	Fire-wood.	Total.		Timber.	Fire-wood.	Total.	Timber.	Fire-wood.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.	C. ft.
1	East Thána	6,027	25	6,052	32,550	20,376	52,926	58,978	38,577	20,401	58,978	...	...	...
2	West Thána	4,335	45,837	50,172	1,245	4,714	5,959	56,131	4,236	48,301	52,537	1,344	2,250	3,594
3	Surat	56,025	...	56,025	77,685	...	77,685	193,710	130,003	...	130,003	3,707	...	3,707
4	Panch Mahals	856	...	856	4,070	10,700	14,770	15,726	4,206	8,400	12,606	820	2,300	3,120
	Total	67,843	45,863	113,705	115,550	35,790	151,340	264,545	177,022	77,102	254,124	5,871	4,550	10,421

It will be seen from the above figures that the departmental transactions of the several divisions were so far successful that the quantity worked out during the year of this report as well as the balances on hand from previous years were to a great extent disposed of. In Surat it is satisfactory to notice that the combination of traders, complained of in previous years, received a wholesome check chiefly owing to some of the sale depôts having been worked on the share system. This system can safely be applied to such forests as those of the Dangs which it is impossible to bring under a regular method of treatment under existing circumstances. Its one advantage is that contractors who undertake the supply are cautious not to stock the depôts with inferior timber for which there is no market. For it is stipulated in the contract agreement that as long as any material remains unsold it lies in the depôts at their risk.

REMOVAL OF PRODUCE BY PURCHASERS.

Timber and Firewood.

163. *Thána.*—The compartments of the year marked out for exploitation were put up for sale, as usual, in August. For the West Thána coupes competition amongst intending buyers being fairly keen, the majority of them were easily disposed of, and the offers accepted were a little higher than the year before. In East Thána the results were not so favourable owing to the inaccessibility of some of the coupes as well as to the inferior quality of the standing crop in others. A belief prevailed that all forest produce outside the Government forests would be handed over to the occupants, and this belief may also have had a disturbing effect on the market.

164. The following table shows the number and extent of the compartments laid out for the year and similar information regarding those sold, with other details :—

No.	Division.	COMPARTMENTS LAID OUT.		COMPARTMENTS SOLD.		Receipts.	Average Price per Acre.
		No.	Area in Acres.	No.	Area in Acres.		
			A. g.		A. g.	Rs. a. p.	Rs. a. p.
1	East Thána	122	6,759 20	85	4,711 20	92,553 0 0	19 6 11
2	West Thána	162	8,522 30	140	7,321 10	2,62,251 0 0	35 12 0
	Total	284	14,206 0	225	12,032 30	3,54,804 0 0	29 7 7

Although the price per acre in East Thána was only Rs. 19-7-0 per acre, the coupes which are conveniently situated, as those of the Bhiwadi Taluka, yielded a revenue of Rs. 26-1-2, while those in Mokhada only produced Rs. 11-6-6. It has been mentioned before (*vide* paragraph 135) that it was not considered necessary to exploit departmentally more than four coupes out of 59 remaining unsold.

165. The gross yield, in cubic feet, of timber and firewood extracted from the coupes is given below :—

No.	Division.	Teak, cubic feet.	Junglewood, cubic feet.	Firewood, includ- ing charcoal, cubic feet.	REMARKS.
1	East Thána ...	511,918	255,959	661,993	
2	West Thána ...	1,148,247	687,528	2,954,850	
	Total ...	1,660,165	943,487	3,616,843	

These figures, it must be noted, have not been derived from actual measurement, but are fairly accurate as showing the amount of forest produce brought to export bandars and railway stations by contractors. The local demand, specially for timber, being small, it may be safely left out of calculation.

166. The material is roughly classified and estimated by Depôt officers on its removal, according to the following formulæ of conversion :—

Beam ...	...=32 cubic feet
First class rafter ...	...=14 „
Second class rafter ...	...= 6½ „
Third class rafter ...	...= 3½ „
Piece ...	...= 3 „
Ordinary cart-load of firewood ...	...=45 „
Khandy of charcoal ...	...=50 „

167. Some coupes are well cleared, and not a stick remains—for example those of the Bassein Range, whereas in others, from which facilities of export are not so numerous, a considerable quantity of both timber and firewood is left. Such material of course has not been taken into account in the above statement.

168. In addition to the outturn from these regular operations, the quantity of firewood removed by privilege-holders and other permit pass-holders has been roughly estimated at 600,000 cubic feet.

169. *Surat*.—The quantity of timber and firewood removed by purchasers and consumers during the two years under comparison was as under :—

Year.	Timber, cubic feet	Firewood, cubic feet.	Total cubic feet.
1891-92 ...	43,509	35,130	78,639
1892-93 ...	68,690	30,739	99,429

The markets were not fed to the same extent as in the previous year by importation from the Thána forests, and, therefore, the demand for all descriptions of timber from the forests of the Dangs revived and continued brisk throughout the year.

170. *Panch Maháls*.—The outturn of the year is compared with that of the preceding year in the following statement ;—

Year.	Timber, cubic feet	Firewood, cubic feet.	Total.
1891-92 ...	37,196	239,400	276,596
1892-93 ...	208,068	242,231	450,349
Difference ...	+170,872	+2,881	+173,753

The timber worked out by purchasers and consumers was chiefly derived from lands outside forest limits, and prices ruled high. There is a slight falling off in the yield of firewood, due probably to a large quantity having been supplied in the previous year to the Godhra-Rutlam Railway Extension Works for brick and lime burning.

Bamboos.

171. The trade in bamboos was further developed, and the results of the year's operations show, in almost all the divisions, a considerable advance over the last year. The demand appears to be on the increase, notably in the Dángs. The yield and receipts of the two years were as under :—

No.	Division.	BAMBOOS REMOVED, 1891-92.				BAMBOOS REMOVED, 1892-93.				REMARKS.
		Cart-loads.	Head-loads.	Number.	Amount realized.	Cart-loads.	Head-loads.	Number.	Amount realized.	
					Rs.				Rs.	
1	East Thána ...	740	1,843	303,092	7,439	1,086	6,386	288,673	9,004	* Large number of bundhis were removed.
2	West Thána ...	8,560	...	240,887	10,683	8,655	5,625	*2,027,223	12,705	
3	Surat ...	...	...	727,032	16,306	...	...	1,136,155	25,364	
4	Panch Maháls ...	99	4	143,378	1,661	193	...	217,272	2,539	
	Total ...	9,399	1,847	1,415,289	36,119	9,934	11,911	3,669,323	49,972	

Minor Produce.

172. The following comparative statement will show that the maxim laid down in Government Resolution No. 9846, dated 15th December 1892, that it is not necessary to make a revenue from minor forest produce, has been duly observed in this Circle :—

No.	Division.	Value realized in 1891-92.	Value realized in 1892-93.
		Rs.	Rs.
1	East Thána ...	2,267	655
2	West Thána ...	4,120	2,475
3	Surat ...	2,176	2,103
4	Panch Maháls ...	1,942	2,371
	Total ...	10,505	7,604

Free Grants of Forest Produce.

173. The following is a statement showing the free grants of timber made during the last two years in the several divisions of this Circle under the sanctioning authority of the Commissioner, N.D. :—

No.	Division.	Value of the free grant during 1891-92.	Value of the free grant during 1892-93.
		Rs.	Rs. a. p.
1	East Thána ...	652	378 8 0
2	West Thána ...	.....	49 12 0
3	Surat ...	15	703 0 0
4	Panch Maháls ...	535	729 4 0
	Total ...	1,202	1,860 8 0